NOVAPPLE Newsletter

$ 1.75

VOLUME VIII - NUMBER 1 NORTHERN VIRGINIA APPLE USERS GROUP JANUARY 1988

COMING SOON, A NEW WAY TO GET THE NOVAPPLE DISK OF THE NOVAPPLE MONTH!!

Starting January 1st Pro-novapple will make the current disk of the month available. So now, you can get those programs that are normally made available at the NOVAPPLE meetings here!

HOW IT WORKS:
If you would like to get the New Disk/Program of the Month, all you have to do is subscribe. The fee is $12.00 a year, made payable to NOVAPPLE. Send your check to: NOVAPPLE, P.O. Box 804, Merrifield, Virginia, Attn: Disk/Program of the Month. Then upon payment, the disk/program of the month will be processed with one of the library utilities such as BLU or PBH. The library file will be placed in your personal user directory and thus available for you to download via modem.

Each month a new disk will be selected and those who subscribe will be notified as to the program file name. Each subscriber will receive notification of the file being placed in their directory by email.

NOTE!! All programs are public domain or shareware!!

If you have questions concerning the New Program/Disk of the Month, please leave a message to myself (William) or Pat Herlands (Path).

--NoVAS

SPECIAL OFFER!!!

Pat Herlands, our wonderful disk librarian, has come up with a good start on a well written group disk library catalog.

This one not only lists the disks, but also gives some much improved descriptions of the files on the disks. This is a great compliment to the new NOVAPPLE Feature - Program/Disk of the Month - coming here the start of January 1st. The catalog will allow you to find with more certainty the disks you would like to have before the next meeting. It should cut down on the amount of time you need to search the disk library, and let you spend more time with the meeting presentations.

The Disk Library Catalog can be purchased in hard copy or on disk as an Appleworks database file. You can pruchase the disk/hardcopy at the monthly meetings for only $2.00 each! You can also purchase it thru this system by having it placed in your user area for you to download. To do so, send $2.00 to: ATTN: Library Catalog, NOVAPPLE, P.O. Box 804, Merrifield, VA 22116.

This disk will be continually updated and the updates are no charge for first time purchasers. If you have questions on this send messages to PATH, WILLIAM, DAVEHARV and someone will get back to you.

--NoVAS

*** Sir-Tech Visit ***

This is just a reminder that SIR-TECH SOFTWARE is coming to Northern Virginia!

And soon! We have invited the software company SIR-TECH to come give a presentation at one of our meetings. Due to the SIR-TECH representative's schedule, she will not be able to attend one of our regular meetings, so we will be having a special meeting on Wednesday, March 30, 1988 in place of our regular Wednesday meeting in March. Ms. Brenda Garno, the SIR-TECH rep, wants some input from our members on what they would like to see. She is especially interested in hearing if there are any members that have completed some of the levels in Wizardry. Let's give Ms Garno all the support we can.

If you have any suggestions for what you would like to see presented, call Dave Harvey at 578-4621 or leave a message for him on the Pro-novapple system.

We'll have more details about when and where the special SIR-TECH meeting will be held as March 30 gets closer.

--NoVAS

FCC PROPOSED ACCESS CHARGES CAN DESTROY PUBLIC NETWORKING.

By Stan Velt

(an editorial from Computer Shopper, Jan.1988)

Back when the counts broke up Ma Bell, they set access charges for the services that the local telephone companies provided to subscribers in reaching the long distance telephone lines. The charges were kept low because of public outcry. At the same time (1983) the setting of the access charges for data were deferred until a later time in order for the infant data industry to develop. The local telephone companies now see that such carriers as Tymnet, Telenet, General Electric GENIE and the CompuServe Network enable users to place a local call to a node and then jump to a distant computer without passing through a long distance company such as AT&T or SPRINT. Now the local company adds the access charge to your bill every month so they are not losing their money. However, they claim that the fee is much too low because in the same time frame you can send so much more data over a line than you can send speech. If this does not make sense to you its because they really do not understand data, just money!

Our "friends" in the FCC are ready to remove the "cushion" they provided for the growth of the data transmission industry. They see the development of such services as Mead who provide medical and legal database information and the various stock market and business information services and they reason that such services would be able to absorb a $5.00 per hour (or greater) charge for access. They also include in this class the various WATS resellers.

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DISCOUNTS

APPLE

SPECIAL OF THE MONTH: 5¼" FLOPPY DRIVE $95.00

MACINTOSH CORNER

- DS/DD DISKS, BOX OF 10 .. $12.00
- DS/DD DISKS, CASE OF 50 . $55.00
- 10 DISK STORAGE BOX $2.50
- 36 DISK STORAGE BOX $9.00
- IMAGEWRITER CABLE $19.00
- MODEM CABLE $19.00
- IMAGEWRITER RIBBON $9.00
- MAC + TO MAC CONVERSION CABLE $7.00
- 3½" FLOPPY DRIVE ..... $115.00 ⊗

5¼ INCH DISKETTES & STORAGE

- SS/DD, BOX OF 10 ..... $5.00
- SS/DD, PAK OF 25 ..... $11.00
- SS/DD, CASE OF 100 ..... $39.00
- SS/DD, CARTON OF 500 ... $175.00
- 2-NOTCH/DS/DD, BOX OF 10 . $6.00
- 2-NOTCH/DS/DD, PAK OF 25 .. $13.00
- 2-NOTCH/DS/DD, CASE OF 100 . $45.00
- 10 DISKETTE CASES ..... $2.25 EACH 5 for $10.00

(SPECIFY COLOR CHOICES: BEIGE, BLACK, BLUE, GREEN, GREY, RED, YELLOW)

- 75 FLIP TOP DISK CASE ... $11.00

PRINTERS

- PANASONIC 1080i/2 ..... $189.00
- PANASONIC 1091i/2 ..... $229.00
- CITIZEN MSP-15, WIDE $399.00
- PANASONIC P3131, LQ $329.00
- NEC P6, LQ $495.00

PRINTER ACCESSORIES

- 1000 SHEETS OF PAPER . $19.00
- 2500 SHEETS OF PAPER ... $29.00
- PANASONIC/CITIZEN/EPSON RIBBONS $7.00
- GRAPHICS PARALLEL INTERFACE CARD $59.00
- PRINTER STAND $14.00
- SWITCH BOX, 2 WAY $39.00
- SWITCH BOX, 4 WAY $59.00

DISK DRIVES

- 5¼" FLOPPY DRIVE ..... $95.00 *
- CONTROLLER $49.00

MONITORS

- MED. RES COMPOSITE $89.00
- HI RES COMPOSITE/GREEN . $129.00
- HI RES COMPOSITE/AMBER . $139.00
- RGB COLOR ..... $269.00 *

MODEMS

- 300/1200 EXT. ..... $95.00 *
- 300/1200/2400 EXT. ..... $189.00 *

SOUND & VIDEO DEVICES

- MUSIC SYNTHESIZER $149.00
- COMPUTEREYES $119.00

CHIPS

- EPROMS 2716/2732/2764 .... $6.00
- EPROMS 27128/27256 ..... $8.00
- 64K, SET OF 8 ..... $12.80 *
- 256K, SET OF 8 ..... $30.40 *

GENERAL ITEMS

- SURGE PROTECTOR $9.00
- 6-OUTLETS WITH SURGE PROTECT $19.00
- MINI POWER CENTER $58.00
- CABLE GENDER CHANGER $9.00
- CABLES (S OR P) $19.00
- GLARE FILTER $29.00
- PLASMA ENERGY SPHERE ... $195.00 ⊗

COMPATIBLE COMPUTERS

- LASER 128 ..... $395.00
- LASER 128EX ..... $475.00 ⊗
- VF PC, APPLE II & IBM COMPATIBLE $929.00
- VF PC, IBM COMPATIBLE .. $580.00
- VF AT, IBM COMPATIBLE . $1040.00
- VF-386 IBM COMPATIBLE . $2540.00

GAME I/O DEVICES

- CH MACH II JOYSTICK $33.00
- CH MACH III JOYSTICK $39.00
- I/O PORT EXPANDER $25.00
- 9-16 OR 16-9 ADAPTER $9.00
- MOUSE $75.00

SLOT EXPANSION

- MULTI-RAM, 64K MEMORY . $119.00
- 320K MEMORY $150.00
- 512K MEMORY $182.00
- RGB OPTION ON MULTI-RAM ..... ADD $40.00
- SERI-ALL $99.00
- ACCELERATOR $179.00
- EDD 4 PLUS EXACT BIT COPY BOARD $69.00
- MULTIPLE-SLOT CHASSIS . $149.00
- SINGLE-SLOT EXTENDER .. $29.00
- QUICK-LOADER PROM BD . $149.00
- PROM BURNER $119.00

SPECIAL PERIPHERALS

- COOLING FAN WITH SURGE PROTECT $39.00
- POWER SUPPLY $69.00
- SHIFT KEY MOD KIT $8.00
- RF MODULATOR $39.00

APPLE SOFTWARE

- COPY II + ... $29.00
- ESSENTIAL DATA DUPLICATOR $25.00
- PLUSWORKS (RUNS APPLEWORKS ON II+) $19.00
- "WRITE CHOICE" WORD PROCESSOR $29.00
- PROTERM COMMUNICATIONS .. $79.00

APPLE IIc CORNER

- SECOND DISK DR FOR IIc ... $95.00 *
- HOTLINK TO PARALLEL PRINTER $55.00
- GRAPPLER C $95.00
- PRINTER OR MODEM CABLE $20.00
- DISK DRIVE CABLE ADAPTER $15.00
- 9-16 GAME I/O ADAPTER $9.00
- MULTI-RAM CX, 256K $239.00
- MULTI-RAM CX, 512K $270.00

*** DENOTES NEW PRICE**
⊗ DENOTES NEW ITEM

LONG DISTANCE:
The new VF toll-free ordering number is now operating. Call **800-666-STAR. For local number, see below.**

UPS SHIPPING
$4.00 per order plus **$6.00** per printer or monitor. Computers: **$30.00**

PLEASE NOTE:
Add **10% per 30 days** for purchase orders. **Prices changes often. Price on day of purchase applies**

CALL FOR OUR FREE CATALOG!

VF ASSOCIATES

8231 Woodmont Avenue, Bethesda, MD 20814 ☎ (301) 652-4232
Bulletin Board Service (Modem) Bethesda ☎ (301) 320-6098

STORE HOURS: Monday through Thursday: 12 noon - 8 p.m.
Friday: 12 noon - 6 p.m. ■ Saturday: 11 a.m. - 5 p.m.

Clinton Computer

Your #1 Apple Dealer!

8032 Leesburg Pike, Vienna, VA (703)442-3800 ✱
277 S. Washington St, Alexandria, VA (703)838-9700 ✱
Authorized Dealer
✱ 6443 Old Alex. Ferry Rd, Clinton, MD (301)856-2500
✱ 9636 Ft. Meade Rd, Laurel, MD (301)953-1110 or (301)792-0600
✱ 12204 Rockville Pike, Rockville, MD (301)881-2810 ✱

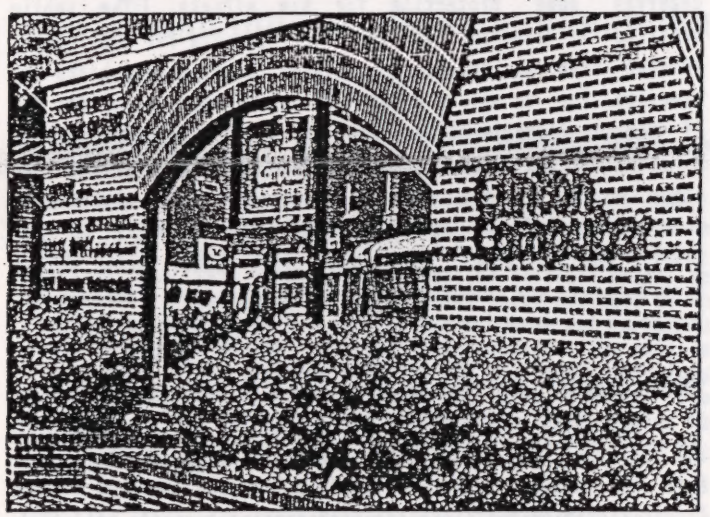
Clinton Computer -- A Full-Service Dealership!

Five Stores Cover Metro Area

Clinton Opens Fifth Store – in Rockville

Clinton Computer, the Metro area's largest independent retail computer dealer, now has five stores -- in Clinton, Rockville and Laurel, MD, and in Vienna and Alexandria, VA. We are authorized dealers for Apple™ microcomputers at all five locations.

In addition, our Clinton and Alexandria stores are authorized IBM™ Personal Computer dealerships. We also sell printers, monitors, software, supplies, and service.



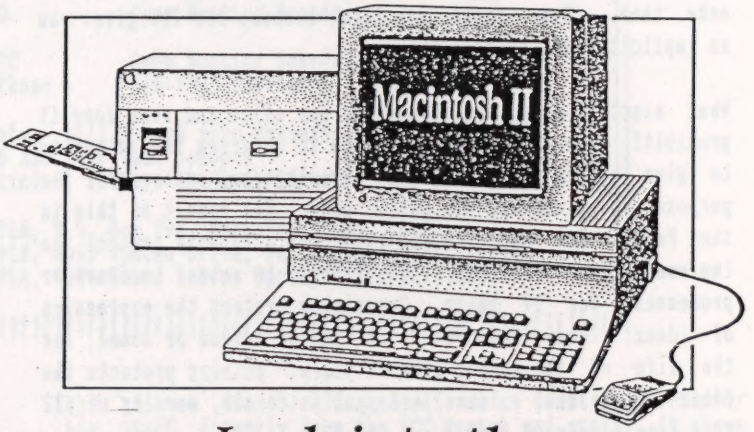
Clinton Computer's Old Town Alexandria Store

The company also operates a huge 3600-square-foot service and repair facility in Clinton, with satellite repair shops at the Laurel, Vienna, Rockville and Alexandria stores.

Clinton Computer was founded in 1978 by co-owners Art Lundquist and Chuck Perilli. It began as a two-man consulting firm on the fourth floor of an office building and has grown into a multi-million-dollar retail business.

DISCOUNT POLICY FOR NOVAPPLE MEMBERS

CLINTON COMPUTER offers NOVAPPLE members a 25% DISCOUNT OFF THE LIST PRICE on all non-allocated Apple brand peripherals (no CPU's), software and AppleCare. For upgrades, the 25% discount applies to both the parts and normal labor rate. Discount is available to persons who have been NOVAPPLE members for at least 3 months. Discount cannot be applied retroactively. NOVAPPLE members need to present their cards up-front. No phone or mail orders, please. Discount cannot be used in combination with other promotions. Products on allocation from Apple are excluded from this offer. Clinton Computer reserves the right to change this policy at any time.



Look into the New Macintosh II

The new Macintosh™ II. There's a lot to look into. And it's easy. Just lift off the cover, and you're inside a whole new world. A world that makes it simple for you to adapt, expand, upgrade, and configure the Macintosh II to meet *your* needs. And with color, too!

What's more, the Macintosh II is the fastest and most powerful member of the Macintosh family -- processing information at four times the speed. And with six internal expansion slots, you have tremendous expansion capabilities. Which means there's practically no limit to what it can do for your business.

Best of all, it's a Macintosh, so training time is minimal. In fact, you can learn to put all these new capabilities to work -- in just a few hours.

Come in and take a close look at the new Macintosh II. There's a lot more to it than meets the eye -- inside and out!

Training Available

Clinton Computer offers a comprehensive training program on both Apple™ and IBM™ microcomputers. Classes, currently scheduled through October, include New Owners' Workshops, Mac Graphics, AppleSoft BASIC, AppleWorks, Lotus 1-2-3, Microsoft Works and more!

For registration information, contact Paula Majerowicz at our Laurel location -- 953-1110.

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Heads In The Sand!

What Software Vendors Don't Want You to Know About Copyrights.
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Let's get this straight at the outset: I write software professionally, so it's not that I want to see software people ripped off by users. But I am also interested in truth and honesty, and there is an awful lot of that missing in the software business. The reason I begin with such a caveat is, It's not always illegal to copy software.

That's right. It is legal to make a copy of a computer program protected by copyright -- sometimes. Some copies are legal, some are not. Some copies of software are legal because the copyright law gives you the explicit right to make them. Some copies are legal because the law gives you an implicit right to make them.

What exactly does the Copyright Law allow and what does it prohibit? The Constitution grants to Congress the authority to give exclusive rights to inventors and authors for the purpose of promoting the public good. The result of this is the Patent Law and the Copyright Law. Patents protect the implementation of ideas, ideas reduced to actual hardware or processes, for 17 years. Copyrights protect the expression of ideas, ideas reduced to writing or images or sound, for the life of the author plus 50 years. Nothing protects the ideas themselves. Ideas are public domain, meaning we all have free access to them.

To be protected by copyright, a program, book, picture, sound recording, or whatever, must display in a conspicuous place (generally specified by law), the word "Copyright" (or the letter "C" in a circle; "(c)" is not good enough!), the year, and the author's name. The law allows for legitimate accidents, but if the work gets out without the required notice and the author does not take timely steps to correct the error, the work passes into the public domain. It has no protection, no owner. You can copy it all you want. The original Altair (now Microsoft) Basic had no copyright notice. Bill Gates complained a lot, but there was nothing he could do to bring it back from the public domain. You can bet that every Basic since then has been properly copyrighted.

During the life of a copyright properly registered, the author is entitled to prevent others from making copies of the protected work of authorship. That is the "right" of "copying" that is exclusive to the author. Copies that the author makes and sells (or gives away, lends, or otherwise distributes) belong to the new owner, and that owner can do anything he wants with his copy -- except copy it. He can even make copies, with certain restrictions. Every time you load a computer program into your computer, you are making a copy of it. There is a copy in the computer memory, and there is the original still on the disk. Legally.

The Copyright law explicitly states that a copy which is necessary for the intended use of the computer program is not an infringement of the copyright owner's rights under the law. If it is necessary for you to make a backup copy of the program in order to use it properly, then making that backup copy is not a violation of the copyright owner's rights. The law actually states that one backup copy is not a violation of the copyright. This part of the copyright law applies to computer software only. You cannot make a "backup" copy of a phonograph record or book or video tape (unless you are a nonprofit library).

Another part of the copyright law applies to any protected work. It is called the "Fair Use" doctrine. You can make copies of a copyrighted work as long as it is "fair use." You recall that Congress has the right to grant copyrights "for the public good." That means that Congress has the authority to restrict those rights for the public good, and that is what Fair Use is all about.

Let's consider what the public good means. If I write a book and anybody can print it and sell it without paying me, then I'm unlikely to spend much effort writing books. It's hard work to write good books or good programs, and the author deserves some protection for his efforts. The public benefits by ensuring that the author is paid for his labors, because thus the author is motivated to write good books and programs for us all to enjoy. Who would buy a novel for $10 if you could get a chinese copy for $1? But who would write a novel if the chinese sold it without paying royalties? In other words, do you prefer an overpriced novel at $10 from your local dealer, or a cheap mail-order novel at $1 that never got written? On the other hand, some public institutions are designed for the public good. Schools and libraries are examples.

These public institutions are allowed to make limited copies of copyrighted works without the permission of the author, if and because they benefit the public by doing so. These are Fair Use copies. The key word is "limited" because if the local libraries went into the book copying business, the book sellers would no longer have profits to pay royalties to the authors, and the authors would stop writing. The Copyright Law gives four rules for defining Fair Use. It requires the consideration of:

1. The purpose and character of the use, including whether such a use is of a commercial nature or for nonprofit educational purposes;

2. The nature of the copyrighted work;

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SCHEDULE OF UPCOMING EVENTS

REGULAR GENERAL MEMBERSHIP MEETINGS

1st Saturday -- Room 110 or 120, Bisdorf Bldg, Alex Campus NoVA CC - 10:00 AM
3rd Wednesday -- Room No.1, FAIRLINGTON COMMUNITY CENTER
3300 S. Stafford Street in Arlington - 7:30 PM

	Saturday	Jan	2	10:00 AM	NVCC	Open Meeting Schedule
	Wednesday	Jan	20	7:30 PM	FCC	Open Meeting Schedule

	Saturday	Feb	6	10:00 AM	NVCC	Open Meeting Schedule
	Wednesday	Feb	17	7:30 PM	FCC	Open Meeting Schedule

	Saturday	Mar	5	10:00 AM	NVCC	Open Meeting Schedule
‡‡	Wednesday	Mar	30	- Check Club Phone -		SIR-TECH MEETING !! ‡‡

CLUB PHONE (Answering machine with announcements - will record your messages.) (301) 899-4005
PRO-NOVAPPLE BULLETIN BOARD SYSTEM (300, 1200 AND 2400 baud speed.) . . (703) 352-5842
(On the PRO-NOVAPPLE BBS, send Newsletters articles, letters to Chuck Edmiston (usr ID = CHE))

Membership & General Correspondence: NOVAPPLE, P.O. Box 804, Merrifield, VA. 22116
Diskette Orders: . . . . . NOVAPPLE, 6069 Wooten Drive, Falls Church, VA. 22044
Newsletter Info & Address: . . . . NOVAPPLE, 6504 Bowie Drive, Springfield, VA., 22150

CHARGES

FROM PAGE 1

The FCC does not see that the imposition of such charges would destroy the Public Information Services such as CompuServe, The Source, GENIE and Delphi. The reason they do not see this is because the various services cannot get together to protest. The users of all these services do not number more than half a million and of these only a handful are concerned enough to write and protest. The official time for filing protests with the FCC has pased, therefore, your protest in any event may not stop the FCC from impossind the charges. The best chance that users of the information services have is to receive an exemption or a special low fee.

Writing to congress may be the only means of stopping the steamroller now gathering speed in the halls of Washington, D.C. Delphi has written to their representative Joseph P. Kennedy II and received a reply which I quote in part, below.

" FCC Docket 87-215 will end a transitional cushion created in 1983. The exemptions that were made in 1983 were never meant to be permanent, they were made to protect certain business from 'rate shock' of an immediate imposition of new fees. The impositiopn of these fees no longer present a potential hazard to the industry.

In may of 1984, the origination and termination charges for an interstate call were $5.24 per single minute and 69 cents to originate one. This represents a sizable drop in the interstate access costs and will mitigate the impact of an imposition of these fees.

As the founder of a small business, I can sympathize with the concerns that the termination of this exemption creates. But it is of upmost concern that the goverment keep its hands free of the market and in no way promote unfair competition."

This letter from Joe Kennedy II was no doubt researched by his staff directly from the FCC docket and staff. It shows no understanding of the potential destruction of the on-line information industry, or sympathy for the half-million users of these services. Representive Kennedy's attitude is typical of Members of Congress who prehaps justly feel that they have more important things to deal with, (or not deal with).

Be that as it may, to us it is important, because if we have to pay a $5 per hour extra charge every time we use Tymnet, or Telenet to call Delphi, or GENIE, or CompuServe we will not be able to bear the cost. Paying the time charges is bad enough, if you add access charges, forget it! We will simply abandon the networks as fast as we adopted them.

Will the networks go out of business as a result? I don't know the answer to that because they do have business services which may pay users to continue to access in spite of the fees. On the other hand, they may go to directly leased lines. However, the average CompuServe, GENIE, or Delphji user is not going to pay the access fee, plus the telephone charges, plus the network hourly charges just to download software or conference with friends. No way!

The answer to this may be in the growth of the local BBS to provide the services now provided by networks. Perhaps a nationwide relay service such as Fideonet will make public domain software available across the U.S. The local BBS can expand their services and impose a fee for the service, many of the better BBS already have charges to cover costs. I see a huge growth in BBS services within local areas. I can also see a huge growth in illegal telephone access. Will the "Blue Box" become reborn on a massive scale? I do not suggest this as a course of action because it would invite restrictive legislation against all personal computer users. There are already enough Neo-Luddites who hate us.

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3. The amount and substantiality of the portion used in relation to the copyrighted work as a whole; and

4. The effect of the use on the potential market for or the value of the copyrighted work.

By rule 3, it is fair use for a reviewer to quote a few sentences from a book in his review, but not to quote the whole book. By rule 1, it might be fair use for a teacher to make a copy for classroom use, but not for a company to make a copy for use in business. By rule 2 a photograph of a copyrighted sculpture might be fair use while a photograph of a painting might not. By rule 4, if you make a copy of a $1000 commercial program and play with it at home for 20 minutes then erase the disk, it is more likely to be fair use than if you make a copy of a friend's $29 game program instead of buying it.

The classic case of fair use happened in the 30s. I have been unable to locate the precise details, but I understand that some fellow was out of work, so he went window-shopping and saw the new Monopoly game in a store. He went home and made himself a copy. Parker Brothers sued -- and lost. The court held that the copy was fair use. Since then the courts and Congress have consistently held that a single copy of a copyrighted work for your own noncommercial use is fair use. A few years ago the courts dropped the ball in the famous Sony Betamax case: the decision held that videotape was not mentioned in the law, so fair use did not apply. Congress immediately changed the law so that videotape is included.

Fair-use copying of software has never been tested in the courts, but some rules of thumb stand out:

* If you are using the software in your business, buy it. If you have three people using the same program on three separate computers, buy three copies. Copies in this environment are not fair use, and the penalties are stiff.

* If you make a copy of a friend's program to evaluate it, then you go buy it, the copy is surely fair use. If you make it a habit to try out software this way and usually buy, then the program you don't buy is probably also fair use, as long as you do not continue to use the copy. I say "probably" because it could go either way in court. I don't think you would be sued by the vendor, though, because they recognize that they are more likely to lose than win and if they lose it would set a precedent: every hacker in the country would hear about it and start copying software wholesale.

* A teenage hacker who is not in business and who cannot afford to buy any software at all, but who collects copies of everything "just to play around" is probably protected by fair use.

* If you buy a program and give a copy to a friend who uses it instead of buying his own, you violated the law; it is not fair use.

* If you buy one copy of a program and install it on a file server in such a way that only one user at a time can use it, then it does not matter how many computers are on the net or how many different people use the program, you have not violated the copyright.

A parting remark. Software sometimes comes with "shrinkwrap licenses" much more restrictive than the copyright law. A Federal court in Louisiana held that a state law cannot give validity to such licenses; the copyright law takes precedence. If you sign a license contract, however, you are bound to the terms of the contract (unless it is contradicted by law). Just breaking the seal on the package is not a signature.

If you are using bootleg software, buy it. If it's good enough to use, it's good enough to buy. If the author and publisher get paid, they will do more good stuff. And if it's no good, for goodness sake, don't buy it. Don't even use it.

--NoVA83

CHARGES FROM PAGE 5

What then is a reasonable course of action? There is just on form of group action that may work and that is a mail campaign addressed to your Representative and Senator as well as the chairman of the committees that deal with this subject in Congress. This was the only thing that reduced the telephone access charges on your phone bill to a reasonable level. You can also write to the FCC Commissioners but I warn you that your protest will fall on deaf ears. These bureaucrats have already made up their minds and their bias in favor of big business is well-known. In spite of this you should let them know how you fell. Another course of action might be to get your local newspapers on your side. Members of Congress often get their impressions about how folks back home feel on issues by reading their - hometown newspapers.

No matter what happens, let us not go down without a fight. Sit at your keyboard and get those letters out to those newspapers editors, Congress members and FCC Commissioners.

Do it now, time is of the essence!
Write to:

Your US Representative.
Your US Senators.
and
Senator Daniel Inouye
Chairman, Senate Subcommittee on Communications
SH-227 Hart Building
Washington, DC 20515

Representative Ed Markey
Chairman, House Telecommunications Subcommittee
B-331 Rayburn Building
Washington, DC 20515

FCC Commissioners:
Mr. Dennis Patrick, Chairman
James H. Quello, Commissioner
Patricia Diaz Dennis, Commissioner
Mimi Dawson, Commissioner
1919 M Street, N.W.
Washington, DC 20554.

This is your fight and you are not going to win unless you add your letters to the stack. I did not take it seriously until I realized that this piece of stupidity was really going to pass and the yoker fit to all our necks. Then I suddenly bolted into action. I hope we are not too late.

--NoVA83

IS YOUR COMPUTER INFECTED?

by William D. Marbach, Richard Sandza,
and Michael Rogers.
(from an article in Newsweek, Feb. 1988)

Last fall nurses at an Eastern medical center noticed an alarming problem - patients' records were mysteriously disappearing from the hospital's computer system. After several weeks experts found the culprit: a small, malicious program known as a computer "virus" had been injected into the system where it proceeded to destroy nearly 40 percent of the records. The person who apparently planted it had left his name and phone numbers (in Pakistan) with a message embedded in the software: " Beware of this virus, contact us for vaccination. " Though they haven't nabbed the culprit, officials stopped the destruction, but computers at a nearby university remain infected.

Computer viruses are silent killers. Usually there are no obvious signs of the infection until the damage has already been done. Hence some are known as "Trojan horses," while "logic bombs" come equipped with long fuses. The viruses are highly contagious. They can travel unnoticed through the electronic networks that link machines. They can also spread every time a contaminated floppy disc is loaded; the virus will remain in the machine's memory (as long as the power is on) and will damage other discs that are inserted. As a result, computers with many users, such as dealer demonstration machines, are especially prone to trouble. " In a matter of minutes, an entire system can be infected," says security expert Robert Courtney.

Like other social diseases, these viruses cut across all classes. Just before Christmas, a virus attacked IBM's worldwide electronic-message network. The program sent holiday greetings to computer users and then passed the same message to everyone on that person's mail - distribution list. In a matter of haours, the massive electronic chain letter overloaded the network. A different virus recently hit Lehigh University in Bethlehem, Pa., destroying data on student's computer diskettes. Another, spread by floppy discs, has plagued some owners of Amiga computers. There are also rumors that the IRS computers have been attacked, though officials inist those rumors are unfounded. " We've known about viruses for over 10 years, but we've just started to really see them in action, " says Donn Parkler, a computer - security expert at SRI International in Menlo Park, Calif.

Immune system:

Scientists worry that viruses could cripple a system like the air - traffic - control computers. Building up their immune systems will be costly. " It will require major changes in operating - systems design, " says computer - security expert David R. Wilson, of Ernst & Whinney.

In the meantime, experts are scrambling to cope with the problem. " We shared information with the IRS, the Department of Defense, the National Security Agency, the Federal Reserve Bank, the nuclear power industry ... anyone who has enemies, " says Eric Hansen, a Minneapolis computer scientist who wrote the Data Physician, software designed to protect againist viruses. Many fear that the electronic vandalism will only get worse. " It's like mass murders or the freeway shootings, " says Peter Neuman, a reseacher at SRI. " You get one and then you get a whole raft of them. "

--NoVA

PC VIRUS : WARNING!

From Kenneth R. van Wyk.

(The following is taken from Risks Digest
on the Othernet Conference.)

Last week, some our student consultants discovered a virus program that's been spreading rapidly throughout Lehigh University. I thought I'd take a few minutes and warn as many of you as possible about this program since it has the chance of spreading much farther than our university. We have no idea where the virus started, but some users have told me that other universities recently had similar problems.

The virus: The virus itself is contained in the stack space of COMMAND.COM. When a PC is booted from an infected disk, all a user need to do to spread the virus is to access another disk via type, copy, dir, etc. If the other disk contains COMMAND.COM, the virus code is copied to the other disk. Then a counter is incremented on the parent. When the counter reaches a value of 4, any and every disk in the PC is erased thoroughly. The boot tracks are nulled, as are the FAT tables etc. All Norton's horses couldn't put it back together again. This affects both floppies and hard disks. Meanwhile, the four children that were created go on to tell four friends, and they tell four friends, and so on, and so on.

Detection: While the virus appears to be very well written, the author did leave behind a couple of footprints. First, the write date of COMMAND.COM changes. Second, if there is a write protect tab on the uninfected disk, you will get a write protect error. So boot up from a suspected virus disk and access a write protected disk. If an error comes up, then you're sure. Note that the length of COMMAND.COM does not get altered.

I urge anyone who comes in contact with publicly accessible disks to periodically check their own disks. Also, exercise safe computing-- always wear a write protect tab.

This is not a joke. A large percentage of our public site disks have been gonged by this virus in the last couple of days."

Well, that's what the note says. I don't know how it will affect the BBS's, but to be safe, people should know.

Need we say more?

Darn, I wish this were a joke, but the message has come from too many sources to be able to discount it. This is one of the more sophisticated "Virus" programs on the PC.

Other programs to watch out for are "corrupted versions" of such things as the Norton Utilities (an associate got a copy of Norton from a "private" section of one BBS, and against ALL COMMON SENSE, immediately tried it on his 20Mb Hard Drive. Well, it seems someone had changed a number of the "Read"s to "Write"s. Bye-Bye data. Total Loss as it nicely clobbered even the disk partition information (PC/MS-DOS Gives up without that).

Where will it end? We don't know. But all we can say is: BE CAREFUL WHEN YOU DOWNLOAD -- CHECK PROGRAMS COMPLETELY!

It's a sad state of affairs when we have to guard our backs against other BBS'ers.

When in doubt... DON'T USE THE PROGRAM! Better to be safe than wiped out!

--NoVA

LETS LEARN OUR X,Y,Z's ABOUT PROTOCOLS.

By Richard Cheshire.

(from an article in Computer Shopper, Feb. 1988)

Operating a communications protocol has nothing to do with how a communications protocol operates. You just call up a menu from a program, and tell it to do the work. Most people don't really care how a program does its thing, just so long as the job gets done. Yet we sometimes get curious as to what is happening "under the hood."

Usually you get the job done by telling the remote computer what you want to do, then when it starts doing it, telling your computer what is going on. Then they synchronize on the fly, and everything is OK. If you tell your computer first, in many cases, the guy at the other end will just sit there, because no one gave him the word.

These days when you go into the FILES section of a modern BBS (Bulletin Board System), there are files available for downloading. Some of these files are actually programs for a computer. These programs are ready to run in "machine code," and much of that code includes ASCII (American Standard Code for Information Interchange) characters that are in the set of Control Characters that would cause your computer to do some pretty irrational things if they were sent just as standard text transmission. As a result, various "Protocol Transfers" have been developed to deal with many of these problems.

The granddaddy of all the micro - computer protocols is Xmodem, developed by Ward Christensen of Chicago. It was something just "cobbled together" to get a particular job done. However, it doesn't quite come under the definition of the term "kludge." A kludge is something that is not elegant at all, but it works. Xmodem's simplicity makes it elegant from many perspectives, but Xmodem has been superseded by newer protocols. There are many things that Xmodem doesn't do, though it gets the job done, and so others wrote software taht took care of the shortcomings of Xmodem.

The Xmodem protocol put the data to be sent into little packages of data called "packets," reminiscent of the "packet boats" that sent goods and mail down the Erie Canal, and other waterways that opened up the great American West. As the data fills one packet with 128 characters, it is sent on its way. The next packet is set up, but before it goes, an acknowledgment of the reception of the first packet must be received. This acknowledgment is one of three things. The ACSII code "ACK" (Acknowledge), the ASCII code "NAK" (Negative Acknowledge) or a Timeout, which means that a specified period of time has passed without receipt of either of the previous characters being received.

The ACK means that the packet has been received all right, and that the next packet can be sent. The NAK character means that the receiving machine has detected an error in the transmission, and that it wants the packet to be sent again. A Timeout can mean that any number of things may have happened such as a ACK being garbled, but results in the packet being retransmitted.

Lets back up a second, and see how the receiving machine can figure out that something went wrong with the transmission. Let's start by looking at what makes uo a packet.

An Xmodem packet starts of with ASCII Character SOH (Start of Header), which is also known as Control-A. The next character is the binary representation of the packet number. The first packet will be numbered "1," or in binary representation "00000001."

The next character sent is the "One's Compliment" of the packet number. Everywhere there is a one, you change it to a zero, and vice versa. In the first packet, the second character will be the binary repesentation of the number 254, which is FE in the hexadecimal representation (base 16), and is "11111110" in binary.

The reason the packet number is sent like this is for redundancy. You can "exclusive or" them (a binary logic function that certain computer chips can do rapidly) and if the result is all zeros, then the packet number came through OK. Then you check to make sure the number you got is the next packet number you were expecting. Once you've sent the packet header (the packet number to be sure things arrive in proper sequence), the next 128 characters are the actual characters of the file you need to send. Following the data is the error detection byte or bytes.

The method used by the original Xmodem standard to determine that all data bits got there, is called Checksum. You simply count up the number of 1 bits, and the number of 1 bits you get becomes the checksum. The receiving machine then also counts the one bits as they come in, and comes up with a checksum. If the computed checksum is the same as the checksum sent by the sending machine, the packet is assumed to have arrived "clean," and an ACK is sent back. The problem with the checksum, however, is that if you get more than one "glitch" in the line, the errors may even out the checksum to something that passes muster at the other end.

For example, if a one is passing by, and the phone company drops the current for that split second, the receiver might detect a zero, and if three character later, a voltage spike hits, and a one is received instead of a zero, those two events cancel each other out. While this problem is fairly rare (except maybe on an extremely noisy phone line which have to retransmit alot of badly received packets anyway), the statistical percentage of bad packets being thought "acceptable" displeased a lot of people.

There is in the data communications world the funny little concept of the Cumulo Redundancy Check (CRC). The CRC is a convoluted mathematical algorithm (tech talk for equation, or "method of computing an answer," which is why a peice of a program is sometimes called a algorithm) that operates on the data as it flies by to come up with a number. The CRC then tacks the resulting number on the outgoing packet, and at the receiving end, the information is again run through the same algorithm to compute the CRC. If the computed CRC equals the received CRC, we once again send a ACK to the sender, or else a NAK goes out, and the sender will retransmit the packet.

Since the CRC comes from the IBM world of mainframes that is all but totally rejected in the micro world, we occasionally find it convenient to " borrow " some ideas from Big Brother. The checksum, by the way, is only byte long (8 bits), while the CRC is 2 bytes (16 bits) long. It doesn't cost much to buy extra piece of mind.

Now we can send binary files between personal computer. First we tell the receiving machine what the file name is, then it tells us to start sending. Then we tell our machine what file to send... Wait a minute! Type the same thing TWICE? What have we got a computer for???!? And 128 characters is too short. We spend a lot of time waiting for the ACK to come back, too. And another thing, when the receiving machine opens a file to receive the stuff we're sending, the date and time on the file is the date and time of transmission, not when the transmission really was created.

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PROTOCOLS

FROM PAGE 8

A few computerists took a look at these "problems" (they were really just annoyances, since the thing worked well enough, but you know computers!), and resolved to do something about them.

Next, the computer community came up with something valled Ymodem. It dealt with some of the "problems" that were found with Xmodem. For one thing, packets were now 1024 characters long, instead of 128 characters. This reduced the number of packets, and therefore reduced the amount of waiting for ACKs and Naks (since there were fewer of them). Ymodem also had a "Header Packet" that included the name of the file being sent, and how large it was. This meant that the receiver could immediately determine if there was enough room on the receiving disk, and if not, abort the transfer before wasting any time.

The next "enhancement" to come down the pike, was "Batch Ymodem," which allowed the user to send a bunch of files all at once. It allowed the use of Wildcard characters the way MSDOS used them, and made the work a lot easier.

Looking over the specs for Zmodem, we find a lot of the features we've worked on over the years have come to set up in a transmission protocol that incorporates an "all of the above" philosophy. The greatest thing about these protocols, is that they are all "backwards compatible," which means that if you call a system that can only handle the simplest Xmodem protocol with checksum, the program will fall back to that.

Besides all this work based on programs that came out of the CP/M era (the years before IBM introduced its PC), there are other protocols out there in the vast micro universe, and talks to minicomputers, and the even Mainframes! Computers science majors at Columbia University in New York City developed a protocol named Kermit (yes, after the frog, and they gaveup trying to figure out an acronym to fit).

There are versions of Kermit for virtually every machine on the market. You may have to go some to find a copy that will run on your own particular machine, since you probably have to have disk drives, and a modem as a bare minimum to even bother dealing with this sort of thing. After all, if you don't have disk drives to store the stuff you download from a remote computer, there is very little you can do with it once you get it.

Kermit is worth getting, though. I had a copy for almost a year, but my trusty data com software on my old Osborne computer got me by just fine. Then came the day when I HAD to put a file onto a mainframe, and the only instructions my buddy would give me was how to start Kermit Server on his machine to get ready to accept my file (a WordStar document that he'd deal with once he got it). I finally got the thing running, and found it "Expert Friendly" (an expert could figure out the help messages, and run it - a "user" would not find it "User Friendly"). We finally got the mainframe dialed up, got the file off to my buddy, and I had another software package under my belt.

These protocols are usually found in a variety of programs. My job these days is helping computer novices get online with the data the database I help run. We get our users copies of Procomm, so I use it now at work and at home. Other friends of mine use Qmodem, a program that a lot of people like. It almost doesn't matter what program you use to talk to your modem (and thence from the modem to the remote computer), today's software has today's protocols included. The big thing to remember is that both sides need to set up using the same protocol, and with the same parameters.

When first starting out, the parameters on both sides may not be set up right. You'll have to experiment until things get started. If you see a lot of "Bad Packet - Retry" messages, things aren't going right, and it's time to try the next parameter. It's when you see the number of "Received Packets" incrementing without error messages, that's when you know its working correctly.

--NoVAC

TELEPHONE ACCESS CHARGES.

By Stan Velt.

(an editorial from Computer Shopper, Feb.1988)

The FCC has delayed the imposition of the killer-charges on telephone line access because they realized they had upset a hornet's nets. Their decision will be delayed until the spring of 1988.

We have an unexpected ally, the Bell operating companies, who want to get into this business themseleves by providing the local gateways. If these fees are levied and the networks are destroyed they have nothing to access, and no gateway business.

In my editorial, I told you that the FCC bureaucrats had nothing but contempt for us, John and Jane Q Citizen who have to pay the charges they propose. In line with this, I read in the authoritative magazine, Data Communications that the FCC insiders discount the flood of letters from the users because they are so well organized through the networks and user groups. Isn't this democracy at work?

As I told you, the only way to fight these bureaucrats is to convince your elected Representative and Senators that the FCC is again trying to pull off one of its muddle-headed actions. Congress is the only power that the FCC fears.

While Congress is at it, they should take a good look at all of the areas where the FCC has exercised its authority and determine if they are acting in accordance with the legislation creating it. We don't need thought police prowling the aisles at computer shows and we don't need Killer Fees.

--NoVAC

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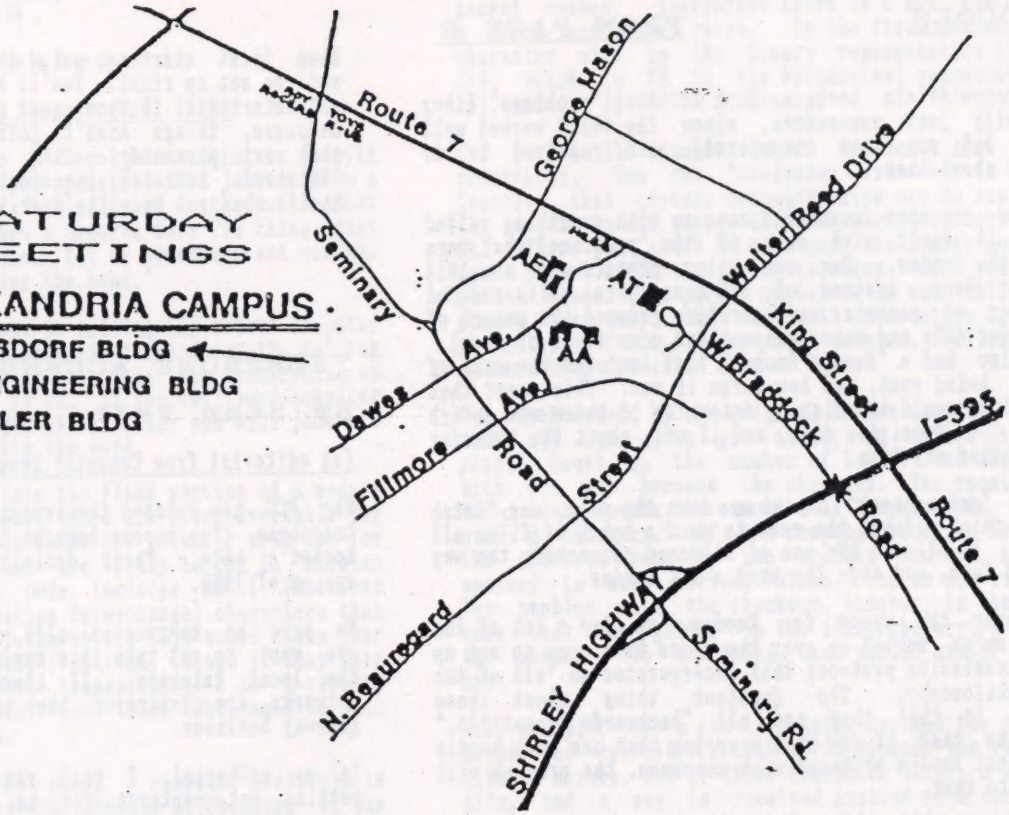

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